AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) Process for the production of an isotropic polymeric network comprising multifunctional molecules with a functionality, n, of at least 5 by contacting in a solvent an amount of the multifunctional molecules with an amount of a coupling agent, whereby through supramolecular chemistry a bond between the multifunctional molecule and the coupling agent is formed.

2. (original) Process according to claim 1 whereby the coupling agent comprises a transition metal and whereby a bond between the multifunctional molecule and the coupling agent is formed through complexation of the transition metal.

3. (original) Process for the production of a isotropic polymeric network according to claim 1, wherein the ratio of the molar amount of the coupling agent to the multifunctional molecule equals n/2.

4. (currently amended) Process for the production of an isotropic polymeric network according to ~~any one of claims 1-2~~ claim 1, wherein ~~wherein~~ the sum, ρ, of the amounts of the multifunctional molecules and coupling agent per unit of volume, in kg/m^3, is at least equal to the value as given by expression (I)

$$\frac{a(m_1 + \frac{n}{2} m_2)}{10^{26} (d + L)^3} \qquad (I)$$

in which

a = 0.2

d = the diameter of the multifunctional molecule, including the length of the bonds to the middle of atoms of the coupling agent to which it is attached[[.]]

L = the length of the coupling agent, measured between the middle of the atoms that are connected to the multifunctional molecule[[.]]

m_1 = the molecular mass of the multifunctional molecule as present in the isotropic polymeric network

m_2 = the molecular mass of the coupling agent as present in the isotropic polymeric network

n = the functionality of the multifunctional molecule ($n \geq 5$).

5. (original) Isotropic polymeric network comprising multifunctional molecules with a functionality of at least 5 and a coupling agent, whereby through supramolecular chemistry a bond between the multifunctional molecule and the coupling agent is formed, with a specific Young's modulus of at least 0.007 GPa.m^3/kg and a density lower than 1300 kg/m^3.

6. (original) Isotropic polymeric network according to claim 5, wherein the network is substantially free of cavities comprising a gas.

7. (currently amended) Shaped article comprising the isotropic polymeric network according to ~~any one of claims 5-6~~ claim 5.

8. (currently amended) Use of the isotropic polymeric network of ~~any one of claims 5-6~~ claim 5 as a construction material.